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09/293.861	04/16/99	ROWLEY	W 5871-Z-DIV

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EXAMINER

DYE, R

ART UNIT PAPER NUMBER

1772

DATE MAILED: 11/08/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/293,861

Applicant(s)

Rowley

Examiner

Rena L. Dye

Group Art Unit

1772

☒ Responsive to communication(s) filed on Apr 16, 1999.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1 and 63-76 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 63-65, and 68-74 is/are rejected.

☒ Claim(s) 66, 67, 75, and 76 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 63-65 and 68-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinstein (5,916,647).

Weinstein teaches an overmolding process wherein an overmolded section 18 comprises a flange 20, a neck section 28, and a female mating section 30. Female mating section 30 is adapted for hermetically sealing engagement (e.g. welding) with machined section 26 of extruded tube 24 via weld line 22. Overmolded section 18 is formed in a mold during the overmolding process. Overmolded section 18 is made from a polyolefin material (first and second polymers). The polyolefin material may be either an extrusion grade or injection moldable grade polymer, but preferably is an exterior grade polymer. Referring to Figure 4, overmolded section 18 is shown in to form machined section 26 of the extruded tube 24 and support the internal surface thereof. The mold is also adapted to form the overmolded section 18 via an injection technique. The fabrication of this multi-parted mold in place, a polyolefin material is injected, at the resin's suggested use temperature, into the mold, and the overmolded section 18 is formed thereby. At

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the same time, the overmolded section 18 is welded to the machined section 26 of the extruded tube 24. Thereafter, the housing 12 (i.e. tube 24 with integrally formed overmolded section 18) is released from the mold. Item 26 of figure 2 illustrates a (internal) threaded portion.

It is the Examiner's position that Weinstein suggests that which is recited in Applicant's present claims respect to the process steps. Therefore, the claimed process is obvious over the reference. The Examiner would like to note that Applicant's recitation of "first and second polymers" does not distinguish the polymers as being different. However, in view of the teaching of Weinstein, the polymers could be the same or different.

Although Weinstein fails to specifically teach crosslinking, it is well known and conventional in the polymer arts to crosslink resins to provide additional strength. The use of mesh overbraiding is conventionally used to provide additional reinforcement in tubing.

Allowable Subject Matter

3. Claims 66,67,75 and 76 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 66-67, the prior art of record fails to teach or suggest the recited process wherein the first and second polymers are polyethylene and each is independently crosslinked to an initial degree and wherein the step of crosslinking independently increases the degree of crosslinking of each polymer to a higher final amount.

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With respect to claim 75, the prior art of record fails to teach or suggest the recited process which further comprises the step of inserting a nut onto the tube after the step of injection molding.

With respect to claim 76, the prior art of record fails to teach or suggest the recited process which further comprises the step of molding a retaining ring onto the first polymer tube by heating a portion of the tube posterior to the nut and comprising at least one end of the tube along a longitudinal axis of the tube, a mandrel having been inserted into the tube prior to the step of compressing.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Dye whose telephone number is (703) 308-4331.



Rena L. Dye
Primary Examiner
Tech Center 1700

R. Dye
November 6, 2000